

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A method for estimating a remaining equipment life based on a plurality of parameters comprising:

collecting data relating to the plurality of parameters;

storing the data;

integrating the stored data, wherein the integrating comprises determining a representation for at least one of the plurality of parameters in terms of a unified index indicative of the remaining equipment life and mapping the at least one of the plurality of parameters to the unified index to generate at least one mapped parameter; and

estimating the remaining equipment life using the integrated data.

2. (original) The method of claim 1, wherein the plurality of parameters comprise at least two of usage data, fault code data and age data.

3. (original) The method of claim 1, wherein the plurality of parameters are selected from the group consisting of usage data, fault code data, age data, failure modes for sub-components, test results, failure modes and effect analysis, maintenance practice, heuristics, and replacement parts information.

4. (original) The method of claim 1, further comprising, prior to integrating, modeling a plurality of relationships relevant to the plurality of parameters to generate a plurality of modeled relationships, wherein integrating the stored data comprises integrating the plurality of modeled relationships.

5-6. (canceled)

7. (currently amended) The method of claim ~~6~~ 1, wherein the mapping further comprises fusing the at least one mapped parameter with at least one other mapped parameter to estimate the remaining equipment life.

8. (currently amended) The method of claim ~~6~~ 1, wherein the mapping further comprises fusing the at least one mapped parameter with at least one other unmapped parameter to estimate the remaining equipment life.

9. (original) The method of claim 7, wherein the fusing comprises using an aggregation technique to estimate the remaining equipment life.

10. (currently amended) The method of claim ~~6~~ 1, further comprising generating a life estimate curve for the equipment based on the unified index, wherein the curve is a model from which the remaining equipment life can be derived.

11-19. (canceled)

20. (currently amended) A system for estimating a remaining equipment life based on a plurality of parameters comprising:

a data storage component configured to store data relating to the plurality of parameters;

a data integration component configured ~~to integrate~~ for integrating the stored data, ~~wherein the data integration component comprises a data modeling subcomponent configured to model a plurality of relationships relevant to the plurality of parameters to generate a plurality of modeled relationships, wherein integrating the stored data comprises integrating the plurality of modeled relationships;~~ and

a life estimation component configured to estimate the remaining equipment life using the integrated data.

21. (original) The system of claim 20, wherein the plurality of parameters comprise at least two of usage data, fault code information and age.

22. (original) The system of claim 20, wherein the plurality of parameters are selected from the group consisting of usage data, fault code data, age data, failure modes for sub-components, test results, failure modes and effect analysis, maintenance practice, heuristics, and replacement parts information.

23. (canceled)

24. (original) The system of claim 20, wherein the data integration component further comprises a data mapping subcomponent configured to determine a representation for at least one of the plurality of parameters in terms of a unified index indicative of the remaining equipment life.

25. (original) The system of claim 24, wherein the data mapping subcomponent is further configured to map the at least one of the plurality of parameters to the unified index, to generate at least one mapped parameter.

26. (original) The system of claim 25 wherein the data mapping subcomponent is further configured to fuse the at least one mapped parameter with at least one other mapped parameter to estimate the remaining equipment life.

27. (original) The system of claim 25, wherein the data mapping subcomponent is further configured to fuse the at least one mapped parameter with at least one other unmapped parameter to estimate the remaining equipment life.

28. (original) The system of claim 24, wherein the system is further configured to use a linear aggregation technique to estimate the remaining equipment life.

29. (original) The system of claim 24 is further configured to generate a life estimation curve for the equipment based on the unified index, wherein the curve is a model from which the remaining equipment life can be derived.

30. (currently amended) A computer-readable medium storing computer instructions for instructing a computer system to estimate a remaining equipment life based on a plurality of parameters, the computer instructions comprising:

collecting data relating to the plurality of parameters;

storing the data;

integrating the stored data, wherein the integrating comprises instructions for determining a representation for at least one of the plurality of parameters in terms of a unified index indicative of the remaining equipment life, wherein the integrating further comprises instructions for mapping the at least one of the plurality of parameters to the unified index, to generate at least one mapped parameter; and

estimating the remaining equipment life using the integrated data.

31. (original) The computer-readable medium of claim 30, wherein the plurality of parameters comprise at least two of usage data, fault code information and age.

32-33. (canceled)

34. (currently amended) The computer-readable medium of claim ~~33~~ 30, wherein the mapping further comprises instructions for fusing the at least one mapped parameter with at least one other mapped parameter or unmapped parameter to estimate the remaining equipment life.

35. (currently amended) The computer-readable medium of claim ~~32~~ 30 further comprising instructions for generating a life estimation curve for the equipment based on the unified index ~~age~~ ~~adjustment value~~, wherein the curve is a model from which the remaining equipment life can be derived.